

FILE

~~Secret~~

Central Intelligence Agency



Washington, D.C. 20505

DATE

7/31/86 FILE

DOC NO

ALA M 86-20037

OIR

2

P & PD /

25X1

DIRECTORATE OF INTELLIGENCE

29 July 1986

MOZAMBIQUE: Vulnerability of the Beira Corridor

25X1

Summary

The history of sabotage and attacks in the Beira transportation corridor, and our analysis of the military capabilities of government and insurgent forces that operate there, indicate that the road, railway, pipeline, and port cannot be effectively protected against attacks carried out by either the Mozambican National Resistance (RENAMO) or South Africa. In our judgment, Mozambican and Zimbabwean troops may be able to provide reasonable security for the corridor's limited number of bridges, oil pumping stations, and other key targets, but are unable to prevent insurgent ambushes, land-mines, and sabotage along this route through RENAMO's heartland. Furthermore, the corridor also is vulnerable to attack by South African commandos, aircraft, or naval forces.

25X1

In our judgment, development of the corridor, as an alternative to dependence on South African facilities, probably would result in greater South African confrontation with its neighbors. Moreover, Zimbabwe's military requirements to protect the Beira corridor may create an opportunity for Moscow to initiate a major arms supply relationship with Harare.

25X1

This memorandum was requested by Phillip Ringdahl, Director of African Affairs, National Security Council. It was prepared by [redacted] Office of African and Latin American Analysis. This paper was coordinated with the Office of Global Issues and the Directorate of Operations. Comments and queries are welcome and may be directed to the Chief, Africa Division, ALA, [redacted]

25X1

ALA M 86-20037

25X1

25X1

~~Secret~~

25X1

Secret

25X1

Over the near term, we expect South Africa to mount pressure on the corridor within a program of gradually escalating economic and military measures against Mozambique and Zimbabwe. Pretoria's least costly option would be to increase covert support to RENAMO in return for more guerrilla sabotage of the corridor. South Africa also could pressure Harare directly with its economic leverage or by providing sizeable aid flows to dissidents in Zimbabwe. Should those measures fail, Pretoria could send commandos to attempt to disable Beira port or key targets along the route to Zimbabwe. We believe that Pretoria is less likely to send its own forces to knock out the corridor, however, without first trying to use indirect military options and economic leverage. 25X1

* * *

25X1

Introduction: the Beira Corridor

The Beira transportation corridor extends from Mutare, in eastern Zimbabwe, to the Mozambican port at Beira, on the Indian Ocean. It is the shortest and potentially cheapest outlet to the sea for central Mozambique, Zimbabwe, Botswana, Zambia, and the southern regions of Malawi and Zaire. For most of these countries, the only feasible alternatives to the Beira corridor are the longer, more costly, and politically vulnerable routes through South Africa. Nonetheless, the Beira route is underutilized due to mismanagement and deterioration since Mozambique's economic collapse at independence in 1975 and to intermittent sabotage by RENAMO and South African commandos. 25X1

The Beira Transportation Corridor

| | |
|-----------|--|
| Railway: | 314 kilometers, narrow gauge, single rail line with passing tracks. Diesel traction. |
| Highway: | 282 kilometers, paved, two-lane road. |
| Pipeline: | 288 kilometers, 27 centimeters (10.6 inch) in diameter, petroleum pipeline. Carries 90% of Zimbabwe's imported petroleum products. |
| Port: | Mozambique's second largest port. Channel depth currently limits access to 25,000-ton vessels at high tide. |

[Redacted]

25X1

Secret

25X1



Secret

25X1

The Southern African Development Coordination Conference (SADCC)¹ considers restoration and expansion of the corridor to be its most urgent program, and has secured funding from countries and multilateral banks in the West, Scandinavia, and Mid-East. The United States at present provides Economic Support Funds to SADCC for use in refurbishing rail lines and diesel locomotives in the corridor.

25X1

SADCC representatives in mid-July 1986 predicted that completion of the first phase of a ten-year development plan--a phase which includes deepening the Beira harbor channel to accommodate 40,000-ton vessels, expanding hotel and communications facilities in the port area, and refurbishing the rail line--will enable the Beira corridor by the end of 1986 to carry 50 percent of SADCC trade that now transits South Africa. In theory, the corridor should carry 100 percent of such trade after phase two is completed in late 1988 or 1989. SADCC officials and press accounts estimate the cost of these improvements at between \$265 and \$421 million, and US officials say the entire 10-year program will cost more than \$600 million. (See Appendix for a discussion of Beira's capabilities and limitations.)

25X1

Protection: Present Capabilities

Mozambican Defenses. we estimate that Maputo has about 4,000 Army regulars and 1,000 provincial militia in the Beira corridor, plus two fighter-bomber squadrons and a transport helicopter squadron at Beira airbase.²

25X1

- In Sofala Province to the east, the 5th Motorized Infantry Brigade headquartered at Beira has five understrength battalions totalling perhaps 2,200 troops. A 200-man airborne battalion is at Beira airbase. There are perhaps 800 militia in numerous understrength provincial battalions along the route.
- In Manica Province to the west, the 3d Motorized Infantry Brigade headquartered at Chimoio near the mid-point of the corridor has four battalions with about 1200 troops. The 1st Border Guard Brigade has about 400 troops in two battalions located near the Zimbabwe border. There are several hundred militia personnel in Manica Province.
- About 30 MIG-17 fighter-bombers and a few MI-8 transport helicopters normally are at Beira airbase. Transports--and, on one occasion, two MI-25 helicopter gunships--have been seen at Chimoio airfield.

25X1

¹ Nine black-ruled states joined together in 1979 to form SADCC to coordinate economic development and lessen dependence on South Africa. Members include Angola, Botswana, Lesotho, Malawi, Mozambique, Swaziland, Tanzania, Zambia, and Zimbabwe.

25X1

² There also is an unknown number of part-time village defense personnel, but they play little or no role in protecting the transportation facilities.

25X1

Secret

25X1

Secret

25X1

- A single Zhuk patrol boat and several naval speed boats protect Beira port. []

25X1

25X1

Mozambican and allied Zimbabwean troops in the Beira corridor outnumber RENAMO's guerrillas there by about 2-to-1, a ratio that, based upon historical experience, is insufficient for effective counterinsurgency operations. Government forces average only 30-35 troops per kilometer of corridor. While they may be able to protect the corridor's limited number of bridges, pumping stations, storage tanks, major intersections, and large towns, they are insufficient, in our judgment, to prevent the guerrillas from disrupting transportation with ambushes, landmines, and sabotage. []

25X1

25X1

25X1

Aside from the issue of troop strength, the [] [] report that the Mozambican Army is woefully ineffective, even by African standards. It is chronically short of transport, ammunition, and food, while leadership, discipline, and morale are poor. Regular Army battalions have abandoned their bases and fled from insurgent attacks, and our defense attache says the militia battalions are understrength and of low quality. Most aircraft are seldom moved and may not be operational. [] []

25X1X1

New efforts to reorganize and strengthen the Army may bring some improvement, but only very gradually. []

25X1

25X1

[] [] small numbers of Soviet multiple rocket launchers and additional armored personnel carriers at some units in the corridor. Soviet instructors are training a new Mozambican airborne battalion at a northern airbase and probably will provide additional unconventional warfare instruction. []

25X1 25X1

25X1

25X1

Zimbabwe's Contribution. Zimbabwe first committed about 2,000 troops in late 1982 to protect the western half of the Beira pipeline. According to US Embassy reporting, the contingent expanded to approximately 9,000 men in September 1985 and spearheaded an offensive that seized RENAMO's headquarters in the nearby Gorongosa mountains. With the onset of the rainy season in November, however, Zimbabwe reduced its forces and operations, and the guerrillas recaptured their former headquarters from Mozambican troops. Despite Zimbabwean frustration that the Mozambicans failed to defend territory won from the insurgents, the Zimbabweans again seized the Gorongosa bases last February before resuming their defensive posture. []

25X1

25X1

We estimate [] that Zimbabwe has about 4,000 troops in the Beira corridor today, and presently carries the principal burden of protecting the corridor. Battalions rotate frequently--and vary in strength from about 300 to over 900 men per unit--but current dispositions are approximately as follows:

Secret

25X1

Secret

25X1

- In the east, there apparently are no Zimbabwean units at Beira, but one battalion guards the bridges over the Pungue River while another is based near the town of Vila Machado.
- In central Mozambique, three battalions occupy the Gorongosa bases, another protects the pipeline's pumping station at Maforga, and another is with the Zimbabwean Special Task Force Headquarters at Chimoio. Other forces patrol across the border from bases in Zimbabwe.
- A Zimbabwean Air Force contingent is at Chimoio airfield, and virtually all of Zimbabwe's 7 to 10 working helicopters are committed to supporting the forces in Mozambique, according to the US Embassy. Fighter-bombers based in Zimbabwe have been used on occasion.

25X1

Presently, Harare's willingness to sustain its extensive and costly commitment indefinitely is far from certain, in our judgment.

25X1

25X1

Zimbabwean commanders want to reduce operations to the minimum necessary to protect the pipeline. US Embassy reporting indicates that President Mugabe so far has disregarded his commanders and insisted on aggressive support for Maputo. However, he was pessimistic about Mozambican military prospects and bluntly told Mozambican President Machel that he should be more candid with the other Frontline States leaders during a summit meeting in mid-July 1986, according to US Embassy sources.

25X1

Mozambican-Zimbabwean military relations are increasingly tense

25X1

25X1

the Zimbabweans accuse their counterparts of refusing to fight and of collaborating with RENAMO, while the Mozambicans say their allies are arrogant and brutal.

25X1

either by accident or in revenge for alleged mistreatment of Mozambican civilians. Meanwhile, Zimbabwean commanders insist that the Mozambican militia is a poorly trained menace that should be disarmed and dissolved.

25X1

25X1

25X1

Vulnerabilities: The Range of Possibilities

for more than 80 percent of its length, the Beira corridor passes through sparsely populated and inaccessible terrain that is difficult to patrol and ideal for guerrilla operations. The eastern third of the route runs through swamps and forests, while the western half climbs through increasingly rugged hills and densely forested mountains. Only about a sixth of the route in the central region passes through savanna grasslands and could be patrolled easily with vehicles or aircraft. The corridor is especially difficult to protect during the November to March rainy season when clouds hinder aerial observation and the flooded countryside is nearly impassable to government vehicles.

25X1
25X1

25X1

Secret

25X1

Secret

25X1

Beira is Mozambique's second-largest city and port, and its harbor is in the mouth of the Pungue River. In our view, saboteurs could close the port or disrupt traffic by sinking a vessel in the entranceway or destroying navigational buoys that mark the entrance channel. Because regular dredging is necessary to prevent river silt from filling the channel, sabotage of the dredges would in time force the port to close. Beira has no power generating plant and depends upon electricity lines that extend for hundreds of kilometers through the countryside. Other potential targets are the petroleum storage tanks and pumps, although tankers can by-pass them in an emergency and use their on-board equipment to pump oil directly into the pipeline. Destruction of locomotives and other equipment at the rail yard could reduce or cut rail service. []

25X1

Lucrative targets along the corridor include the major rail and road bridges over the Pungue River as well as the Revue River and Reservoir, plus smaller bridges and culverts. In addition to rail and road infrastructure, the oil pipeline is a tempting target. The pipeline itself is mostly underground, but exposed sections attached to the bridges, and the isolated and essential pumping station at Maforga, are more vulnerable. The pipeline terminates in Zimbabwe at the now inoperable refinery in Feruka, a suburb of Mutare, where the storage tanks are used to hold deliveries until they can be shipped onward by road or rail. []

25X1

Mozambican Insurgents. RENAMO has struck military and economic targets in the Beira corridor since about 1977. In the 13-months just before Zimbabwe sent its troops into the corridor in November 1982, there were [] at least six successful guerrilla attacks that closed the oil pipeline for periods varying from one day to a month. []

25X1

25X1

25X1

Sabotage of the pipeline and railway diminished from 1983 through 1985--a lull probably attributable both to the presence of the Zimbabweans and to RENAMO's preference not to challenge Zimbabwe's protection. Last November, for example, US diplomats drove 135 kilometers of the Beira-Mutare road without incident. []

25X1

Nonetheless, the guerrillas continued to attack military forces and some civilian targets nearby, and a series of recent attacks on transportation targets suggests that the lull is ending. []

25X1

25X1

Secret

25X1

Page Denied

Secret

25X1

Recent Attacks on the Beira Corridor

1986:

14 April:

Destruction of a section of the pipeline caused a loss of more than 1 million liters of gasoline, [redacted]

25X1

16 May:

[redacted]

25X1

28 May:

Sabotaged power lines cut electricity supplies to Beira. [redacted]

25X1

25X1

15 June:

A Zimbabwean patrol chased off a group of insurgents preparing to blow up the pipeline.

25X1

23 June, 3 July:

The US Embassy reported that Beira airbase was hit on two occasions by mortar fire.

9 July:

Saboteurs attempted unsuccessfully to dig up the pipeline in two locations, [redacted]

25X1

25X1

14 July:

Demolitions again cut the pipeline. [redacted]

25X1

25X1

25X1

Secret

25X1

Secret

25X1

25X1

Outlook

We believe that the relative lull in insurgent sabotage of the Beira corridor is ending, possibly due to South African encouragement, and that Pretoria may soon increase other military and economic pressures on the corridor, and directly against Zimbabwe, in an effort to demonstrate and reinforce South African regional economic and military dominance. South Africa, in our judgment, will most likely select gradually escalating measures beginning with indirect, deniable military actions and flex some of its economic leverage before turning to direct military attacks. Under this scenario, South Africa might employ its options roughly in this order:

- Urge RENAMO to increase harassment of transportation in the corridor. This could involve some increase in covert South African support, but would be designed to be deniable.
- Recall or delay providing South African locomotives and railcars leased for use on the Beira rail line. This nonviolent step would demonstrate Pretoria's clout, and it might be timed to coincide with attacks on the corridor to disrupt the upcoming Nonaligned Nations Conference--scheduled for late August 1986 in Harare--or to embarrass President Mugabe or Machel.

Secret

25X1

Secret

25X1

- Send South African commandos to disable Beira port, the essential pumping station at Maforga, a bridge along the corridor, or the oil tanks or railroad facilities near Mutare. A joint operation with RENAMO, for example, might overpower Zimbabwean guards at Maforga, or commandos could attack Beira from a submarine or surface ship offshore.
- Resume or increase aid to Matabele dissidents in Zimbabwe. This would strain Zimbabwean military capabilities, possibly forcing Harare to reduce its forces in Mozambique.
- Resume substantial aid to RENAMO. Pretoria could show its defiance and possibly overextend the Mozambican and Zimbabwean armed forces, but the Nkomati nonaggression pact would be totally discredited.
- Mount commando attacks in Zimbabwe on anti-South African insurgent targets, economic facilities, or military installations. An attack on Thornhill airbase, for example, where recently delivered Chinese F-7 fighters are being assembled, might appeal to Pretoria as a means of removing a potential threat to South Africa, embarrassing Mugabe during the Nonaligned Nations Conference, or inducing Harare to withdraw some troops from Mozambique.
- Use airstrikes or naval forces against the Beira corridor or other targets in Zimbabwe or Mozambique.

25X1

Harare and Maputo could, of course, take further steps to try and enhance security in the corridor, but we doubt that they would deter or defeat a determined South African attack. We assume that the corridor is so important to Zimbabwe economically that it would send more forces there if necessary, but Harare would be extremely hardpressed to sustain a much increased commitment indefinitely in view of the costs, frustrations with the Mozambican forces, and the Matabele dissidence. Some Mozambican officials may believe that a model for securing the Beira corridor exists in the small scale efforts by Esso-Shell and Lonrho--two Western firms doing business in Mozambique--who have arranged to protect their work sites by organizing and funding a private security force and an Army battalion. Nonetheless, we believe that foreign investors would balk at the cost of a force large and well enough equipped to protect the entire corridor.

25X1

25X1

Secret

25X1

Secret

25X1

Appendix**Beira Capacities and Limitations**

Based on a survey of press, US Embassy, [] reporting as well as official government statistics, we estimate that Beira would have to accommodate about 5.5-7.0 million tons a year of additional freight to maintain trade flows by Zimbabwe, Zambia, Malawi, Botswana, and southern Zaire in the event of a South African trade and transportation embargo. This would include most current shipments by these countries--about 6.5-8.0 million tons annually--to South African markets and via South African transport facilities to overseas markets. Excluded would be about one-half million tons that, according to our estimates, could be diverted through the ports of Dar-es-Salaam, Matadi, and Nacala, and one million tons of exports to South Africa that would likely be irrevocably lost--mainly Zimbabwean manufactured goods such as furniture and textiles. []

25X1

Major rail and port rehabilitation and expansion projects would have to be completed to enable Beira to handle 5.5-7.0 million additional tons of freight. The impact of the insurgency and severe deficiencies in maintenance and management have depressed freight traffic through Beira to less than 200,000 tons of non-Mozambican freight annually, compared with 3.0 million tons prior to Mozambique's independence. Although there are no insurmountable obstacles to rebuilding Beira's freight handling capacity, substantial additional funding to that now planned would be required to absorb shipments diverted from South Africa, in our judgment. Counting 1.0-2.0 million tons of domestic Mozambican freight, port capacity would have to be expanded to 6.5-9.0 million tons to handle diversions from South Africa. Current plans funded by SADCC donor countries, however, call for expanding port capacity to only 3.9 million tons by 1989 and 5.1 million tons by 1995, according to press reports. []

25X1

25X1

Secret

25X1

Secret

25X1

Beira: Rail and Port Traffic^a

Million Tons Per Year

| | Prior to Mozambican Independence | Current | Required to Substitute for South African Routes |
|-----------------------|--|------------|---|
| Total | 4.0 | 1.2 | 6.5–9.0 |
| Non–Mozambican | 3.0 | 0.2 | 5.5–7.0 |
| Zimbabwe ^b | 1.3 | 0.1 | 4.0–5.0 |
| Zambia | 0.7 | Negl | 0.4–0.5 |
| Zaire | 0.5 | Negl | 0.3–0.4 |
| Malawi | 0.5 | Negl | 0.6–0.8 |
| Botswana | 0 | 0 | 0.2–0.3 |
| Mozambique | 1.0 | 1.0 | 1.0–2.0 |

^a Data are estimated

25X1

^b Data exclude shipments of petroleum products by pipeline.

25X1

Secret

25X1

Secret

25X1

SUBJECT: MOZAMBIQUE: Vulnerability of the Beira Corridor

25X1

Original--Phillip Ringdahl, Director of African Affairs, National Security Council

1--Stephen Sestanovich, Director, Political-Military Affairs, National Security Council

1--Robert Cabelly, Special Assistant to the Assistant Secretary of State, Bureau of African Affairs

1--Charles Freeman, Deputy Assistant Secretary of State, Bureau of African Affairs

1--Roy Stacy, Deputy Assistant Secretary of State, Bureau of African Affairs

1--J. Douglas Holladay, Working Group on South Africa and Southern Africa, Department of State.

1--Edward G. Lanpher, Director, Office of Southern African Affairs, Department of State

1--Raymond F. Smith, Deputy Director, Office of Southern African Affairs, Department of State

1--F. Allen Harris, Deputy Director, Office of Southern African Affairs, Department of State

1--Peter Lande, Director, Economic Policy Staff, Bureau of African Affairs, Department of State

1--Ambassador H. Allen Holmes, Director, Bureau of Politico-Military Affairs, Department of State

1--R. Rand Beers, Director, Office of International Security Policy, Bureau of Politico-Military Affairs, Department of State

1--Anthony S. Dalsimer, Director, Office of Analysis for Africa, INR, Department of State

1--Leo Cecchini, Desk Officer for Mozambique, Bureau of African Affairs, Department of State

1--M. Peter McPherson, Administrator, AID

1--James Woods, Acting Deputy Assistant Secretary of Defense for Africa, ISA

1--Vincent Kern, Acting Director of African Affairs, ISA, Office of the Secretary of Defense

1--William Thom, Acting Defense Intelligence Officer for Africa, DIA

1--Douglas Mulholland, Special Assistant to the Secretary, National Security, Department of the Treasury

1--Byron Jackson, Director, Office of Intelligence Liaison, Department of Commerce

1--DDI

1--NIO for Africa

1--NIC

1--DDO/Africa

1--DDO/AF

1--PDB Staff

1--ILS

1--C/DDI/PES

1--D/ALA

1--ALA Research Director

2--ALA/PS (one sourced copy; one clean)

25X1

Secret

25X1

Secret

[Redacted]

25X1

- 4--OCPAS/IMD/CB
- 4--ALA/AF
- 4--ALA/C (Analyst)
- 4--ALA/C (File)

ALA/AF/ [Redacted] (29 July 1986)

25X1

Secret

[Redacted]

25X1